

## CLAIMS LISTING

1. (currently amended) A stimuable phosphor screen or panel suitable for use in mammographic applications comprising a binderless phosphor layer having needle-shaped crystals, said layer not exceeding a layer thickness of 150  $\mu\text{m}$ , and a support wherein an intermediate layer arrangement of an X-ray absorbing foil or layer ~~absorbing x-rays to a lower extent, and avoiding scattering to a great extent,~~ and, farther from the support, a stimulated light reflecting foil is present between said support and said phosphor layer.
2. (previously presented) A stimuable phosphor screen or panel according to claim 1, wherein said intermediate layer arrangement comprises an X-ray absorbing layer comprising a binder wherein said binder is a matrix of a polycondensation product of a metal alkoxide species, and an oxide or a hydroxide of lead metal is dispersed in said binder.
3. (original) A stimuable phosphor screen or panel according to claim 2, wherein said binder containing the lead compound is a matrix of an inorganic network of alkoxymetal substituted organic polymers or copolymers matrix.

- 4.(original) A stimuable phosphor screen or panel according to claim 3, wherein said matrix is derived from a cross-linking agent selected from the group consisting of dialkoxysilanes, trialkoxysilanes, tetraalkoxysilanes, titanates, zirconates and aluminates; and a colloid of silica, and wherein said matrix comprises a colloid of an oxide or a hydroxide of lead metal.
- 5.(original) A stimuable phosphor screen or panel according to claim 1, wherein said intermediate layer arrangement comprises, as an X-ray absorbing layer a layer of lead.
- 6.(original) A stimuable phosphor screen or panel according to claim 1, wherein as a stimulated light reflecting foil an aluminum layer is present.
- 7.(original) A stimuable phosphor screen or panel according to claim 2, wherein as a stimulated light reflecting foil an aluminum layer is present.
- 8.(cancelled)
- 9.(cancelled)
- 10.(cancelled)
- 11.(original) A phosphor screen or panel according to claim 1, wherein said support is selected from the group consisting of ceramics, glass, amorphous carbon, aluminum and polymeric films.

- 12.(original) A phosphor screen or panel according to claim 6,  
wherein said support is selected from the group consisting  
of ceramics, glass, amorphous carbon, aluminum and  
polymeric films.
- 13.(original) A phosphor screen or panel according to claim 1,  
wherein said intermediate layer arrangement has a surface  
that has been subjected to embossing for forming a fine  
concavo-convex pattern.
- 14.(original) A phosphor screen or panel according to claim 6,  
wherein said intermediate layer arrangement has a surface  
that has been subjected to embossing for forming a fine  
concavo-convex pattern.
- 15.(cancelled)
- 16.(cancelled)
- 17.(original) A phosphor screen or panel according to claim 1,  
having between said intermediate layer arrangement and the  
support a moisture-repellent parylene layer.
- 18.(original) A phosphor screen or panel according to claim 6,  
having between said intermediate layer arrangement and the  
support a moisture-repellent parylene layer.
- 19.(cancelled)
- 20.(cancelled)

- 21.(original) A phosphor screen or panel according to claim 1,  
having between said intermediate layer arrangement and the  
phosphor layer a moisture-repellent parylene layer.
- 22.(original) A phosphor screen or panel according to claim 6,  
having between said intermediate layer arrangement and the  
phosphor layer a moisture-repellent parylene layer.
- 23.(cancelled)
- 24.(cancelled)
- 25.(original) A phosphor screen or panel according to claim 1,  
having between said intermediate layer arrangement and the  
phosphor layer and between said intermediate layer  
arrangement and the support a moisture-repellent parylene  
layer.
- 26.(original) A phosphor screen or panel according to claim 6,  
having between said intermediate layer arrangement and the  
phosphor layer and between said intermediate layer  
arrangement and the support a moisture-repellent parylene  
layer.
- 27.(cancelled)
- 28.(cancelled)
- 29.(cancelled)
- 30.(cancelled)
- 31.(cancelled)

32. (cancelled)

33. (cancelled)

34. (previously presented)      A binderless stimuable phosphor screen or panel according to claim 1, wherein said needle-shaped phosphor crystals are crystals of an alkali metal halide phosphor.

35. (previously presented)      A binderless stimuable phosphor screen or panel according to claim 2, wherein said needle-shaped phosphor crystals are crystals of an alkali metal halide phosphor.

36. (cancelled)

37. (previously presented)      A binderless stimuable phosphor screen according to claim 34, wherein said alkali metal halide phosphor is a CsX:Eu stimuable phosphor, wherein X represents a halide selected from the group consisting of Br, Cl and I.

38. (previously presented)      A binderless stimuable phosphor screen according to claim 35, wherein said alkali metal halide phosphor is a CsX:Eu stimuable phosphor, wherein X represents a halide selected from the group consisting of Br, Cl and I.

39. (cancelled)

40. (cancelled)

41. (cancelled)

42. (cancelled)

43. (cancelled)

44. (cancelled)

45. (previously presented)      A phosphor screen or panel  
according to claim 1, wherein said x-ray absorbing foil or  
layer has a thickness in the range of 25 to 150  $\mu\text{m}$ .

46. (previously presented)      A phosphor screen or panel  
according to claim 2, wherein said said x-ray absorbing  
foil or layer has a thickness in the range of 25 to 150  $\mu\text{m}$ .

47. (previously presented)      A phosphor screen or panel  
according to claim 5, wherein said said x-ray absorbing  
foil or layer has a thickness in the range of 25 to 150  $\mu\text{m}$ .

48. (previously presented)      A phosphor screen or panel  
according to claim 6, wherein said aluminum layer has a  
thickness in the range of 0.5  $\mu\text{m}$  to 5  $\mu\text{m}$ .

49. (previously presented)      A phosphor screen or panel  
according to claim 7, wherein said aluminum layer has a  
thickness in the range of 0.5  $\mu\text{m}$  to 5  $\mu\text{m}$ .

50. (previously presented)      A phosphor screen or panel  
according to claim 1, wherein said support is a PET support  
having a thickness in the range from 100  $\mu\text{m}$  to 1000  $\mu\text{m}$ .

51. (previously presented)      A phosphor screen or panel  
according to claim 2, wherein said support is a PET support  
having a thickness in the range from 100  $\mu\text{m}$  to 1000  $\mu\text{m}$ .
52. (previously presented)      A phosphor screen or panel  
according to claim 5, wherein said support is a PET support  
having a thickness in the range from 100  $\mu\text{m}$  to 1000  $\mu\text{m}$ .
53. (previously presented)      A phosphor screen or panel  
according to claim 6, wherein said support is a PET support  
having a thickness in the range from 100  $\mu\text{m}$  to 1000  $\mu\text{m}$ .
54. (previously presented)      A phosphor screen or panel  
according to claim 7, wherein said support is a PET support  
having a thickness in the range from 100  $\mu\text{m}$  to 1000  $\mu\text{m}$ .
55. (previously presented)      A phosphor screen or panel  
according to claim 1, wherein said support is an amorphous  
carbon support having a thickness in the range from 100  $\mu\text{m}$   
to 3000  $\mu\text{m}$ .
56. (previously presented)      A phosphor screen or panel  
according to claim 2, wherein said support is an amorphous  
carbon support having a thickness in the range from 100  $\mu\text{m}$   
to 3000  $\mu\text{m}$ .
57. (previously presented)      A phosphor screen or panel  
according to claim 5, wherein said support is an amorphous

carbon support having a thickness in the range from 100  $\mu\text{m}$  to 3000  $\mu\text{m}$ .

58. (previously presented)      A phosphor screen or panel according to claim 6, wherein said support is an amorphous carbon support having a thickness in the range from 100  $\mu\text{m}$  to 3000  $\mu\text{m}$ .

59. (previously presented)      A phosphor screen or panel according to claim 7, wherein said support is an amorphous carbon support having a thickness in the range from 100  $\mu\text{m}$  to 3000  $\mu\text{m}$ .